

ABSTRACT OF THE DISCLOSURE

The aluminum-free borosilicate glass has a composition in percent by weight based on oxide content of: SiO₂, 65 - 77; B₂O₃, 7 - 20; Li₂O, 0 - 2; Na₂O, 0 - 4; K₂O, 3 - 12; MgO, 0 - 2; CaO, 0 - 2; with MgO + CaO, 0 - 3; BaO, 0 - 3; ZnO, 0 - 2; ZrO₂, 0.8 - 12; TiO₂, 0 - 10; CeO₂, 0 - 1; and F⁻, 0 - 0.6. This glass advantageously has a coefficient of thermal expansion α (20°C; 300°C) of between 3.0×10^{-6} /K and 6×10^{-6} / K, good chemical resistance and a working point V_A of between 990°C and 1290°C.